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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,653	09/29/2003	Donald May	87838.0008	2355

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STEPTOE & JOHNSON LLP  
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PHOENIX, AZ 85004

EXAMINER
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SALDANO, LISA M

ART UNIT	PAPER NUMBER
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3673

DATE MAILED: 08/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/673,653

Applicant(s)

MAY, DONALD

Examiner

Lisa M. Saldano

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– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14 and 21-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-14, 21 and 22 is/are allowed.
- 6) ☒ Claim(s) 23-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kelsey (6,074,133) in view of Schmednecht et al (6,247,875).

Regarding claim 23, Kelsey discloses an adjustable foundation piercing system for supporting a foundation or footer 40 having a bottom surface. Kelsey discloses a pier shaft 22, a pier cap stabilizer shaft comprising element 23, which is mounted to the top of pier 22, as well as pier attachment 28 (see Fig.3), wherein at least a portion of the pier cap stabilizer shaft extends above the bottom surface of a foundation or footer 40, as installed. The pier cap stabilizer is laterally engaged with the foundation/footer via handles 29. A shelf 21 is mounted onto the pier cap stabilizer shaft via lateral supports 25 (see Fig. 4). Kelsey also discloses a hydraulic jack 50 that extends between the shelf and the bottom surface of the footer 40 (see Fig.3).

However, Kelsey fails to disclose a screw jack for lifting purposes.

Schmednecht et al disclose a method and apparatus utilizing a hollow beam for constructing subterranean walls wherein Schmednecht et al disclose the use of a hydraulic jack

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182, but also state that other linear actuators may be used for lifting purposes such as a pneumatic jack and a jack screw (see column 7, lines 40-50).

It would have been obvious to one of ordinary skill in the art at the time of the invention to substitute the hydraulic jack of Kelsey with a screw jack, as taught by Schmednecht et al, because both the hydraulic jack and the screw jack a mechanically equivalent apparatuses for lifting, as suggested by Schmednecht et al.

3. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kelsey in view of Schmednecht et al, as applied to claim 23, and further in view of Jones (5,800,094).

Kelsey and Schmednecht et al disclose the inventions as described above.

However, Kelsey and Schmednecht fail to disclose a helix mounted to the pier shaft.

Jones discloses an apparatus for lifting and supporting structures comprising a helical pier 32 (see Fig.2).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the pier of Kelsey to use a helical pier, as taught by Jones, because both inventions are directed to lifting a civil structure by using the bearing capacity of a driven pier located in the earth or ground. Both the pier taught by Kelsey, as well as the helical pier of Jones, are functional equivalents to achieving that objective.

4. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kelsey in view of Schmednecht et al, as applied to claim 23, and further in view of Thornley (2,465,557).

Kelsey and Schmednecht et al disclose the inventions as described above.

However, Kelsey and Schmednecht fail to disclose a pier cap mounted to the bottom end of the pier.

Thornley discloses a pile and method of making the same. Thornley discloses that the pile comprising shell 1 is driven with a concrete plug or cap 2 mounted to the bottom end of the shell (see Figs. 1-3). Thornley discloses that the method of driving the pile with the concrete plug provides for the driving force to be focused primarily on the plug, minimizing force, especially frictional resistance, on the pile itself during driving (see columns 5 and 6). This method reduces the likelihood of distortion of the shell or pile. The pile is ultimately placed upon a firm subterranean stratum for structural support (see claim 3).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the pier of Kelsey to comprise a pier cap at the bottom end, as suggested by Thornley, because the pier cap provides for reduction of frictional resistance on the pier during the pier driving process, as suggested by Thornley.

5. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kelsey in view of Schmednecht et al, as applied to claim 23, and further in view of Grzelka et al (4,538,938).

Kelsey and Schmednecht et al disclose the inventions as described above.

However, Kelsey and Schmednecht fail to disclose a screw jack guide to locate the screw jack assembly on the invention.

Grzelka et al disclose an adjustable chock system for use on a jack-up rig comprising screw jacks 50. The screw jacks are located on a working platform 12 (see Fig.4). Grzelka et al

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disclose a guide track 52 to guide the screw jacks on the working platform (see column 2, lines 50-55). The guides help to retain the screw jacks in a desired orientation.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the pier assembly of Kelsey comprising a jack to include a guide, as suggested by Grzelka et al, because it assists in proper location of the jack relative to the rest of the invention and assists secure operation of the jack when jacking the pier cap stabilizer up against the foundation footing.

***Terminal Disclaimer***

6. The terminal disclaimer filed on 7/2/2004 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of as determined by prior patent No. 6,659,692 has been reviewed and is accepted. The terminal disclaimer has been recorded.

***Allowable Subject Matter***

7. Claims 1-14, 21 and 22 would be allowed over the prior art of record.

8. The following is a statement of reasons for the indication of allowable subject matter: Regarding independent claim 1, the closest prior art of record, Jones (5,800,094), discloses a pier driven into earth and a pier cap stabilizer mounted on top of the pier with a shelf mounted to the

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pier cap stabilizer and a screw jack positioned on the shelf. However, Jones fails to disclose that the pier cap stabilizer has a pier cap stabilizer shaft wherein the top of the pier cap stabilizer shaft extends above a bottom surface of a footer/foundation and is also mounted to the footer, in combination with the rest of the limitations presented by the applicant in claim 1.

Regarding independent claim 8, the closest prior art of record, Jones (5,800,094), fails to disclose a pier assembly for supporting a notched footer whereby the pier extends through the notch formed in the footer/foundation in combination with the rest of the limitations of presented by the applicant in claim 8.

### *Conclusion*

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. More specifically, the applicant amended the claims by adding all new claims 23-26, which had not been presented before.

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lisa M. Saldano whose telephone number is 703-605-1167. The examiner can normally be reached on Monday-Friday, 8:30am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather C. Shackelford can be reached on 703-308-2978. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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